



FeedPGH

Understanding Food Insecurity
in the City of Pittsburgh

July 2020



Acknowledgements

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Table of Contents

Executive Summary	1
Introduction	3
Dimensions of Food Security	4
Food Availability	4
Food Access	10
Food Utilization	13
Food System Stability	15
Healthy Food Priority Areas	17
Goals	21
In Relation to the SDGs	24
Conclusion	25
References	55
Appendix	31
HFPA Maps	31
HFPA Methodology	32
Additional Maps	33

Executive Summary

In 2019 approximately 63,000 Pittsburgh residents were ‘food insecure,’ meaning that more than a fifth of the population were limited by economic and social conditions which affected their consistent access to adequate food. Food insecure people may be limited by distributional and transportation barriers to physically accessing food, but many are also simply unable to afford food or are not able to prepare healthy food due to underlying socioeconomic conditions.

Every day that we fail to act, the most vulnerable in our population – children, seniors, college students, people with disabilities, racial minorities, and low-income households – are going hungry. According to the Pittsburgh Equity Indicators, the ratio of very low food security between Black and White residents increased between 2017 and 2018. Meanwhile, health outcome gaps exacerbated by improper nutrition have widened for diseases such as diabetes and hypertension.

In response to elevated food insecurity in the City of Pittsburgh as compared to Allegheny County, the state of Pennsylvania, and the country, Mayor Bill Peduto signed onto the Milan Urban Food Policy Pact in 2016. At the same time, the City updated its Urban Agriculture Code to make it easier for people to grow and raise their own food, and soon after, put into effect the Adopt-A-Lot Program to encourage food production on city-owned vacant lots. In 2017, the Pittsburgh Climate Action Plan 3.0 and the OnePGH resilience strategy listed food as a resilience objective, providing the impetus for a comprehensive report on food insecurity in Pittsburgh. In 2019, the City resolved to achieve Zero Hunger, cementing Pittsburgh’s commitment to prioritizing food security as a sustainability, resilience, and public health objective.

The FeedPGH report describes the root causes of food insecurity and identifies Healthy Food Priority Areas (HFPA), or areas where food insecurity is more acute, in the City. This information, along with best practices from other cities and input from HFPA community members, are critical for a plan of action and equity. The City of Pittsburgh has long established its commitment to take leadership on this front.

Healthy Food
Priority Areas ▶

Ultimately, this report establishes four goals for the City of Pittsburgh: **Develop Food Pathways**, **Develop People**, **Develop Place**, and **Develop Culture**. This report is the first step to reach these goals.

*Together, we can build a resilient food system
to ensure that every resident is food secure,
both now and into the future.*



Introduction



In 2018, approximately 14 million Americans - more than 11% of the population - “lacked consistent access to enough food for an active, healthy life” (Feeding America, 2018; U.S. Department of Agriculture, Economic Research Service, 2018). In other words, they were food insecure. In Pittsburgh and Allegheny County, the estimated rate of food insecurity sits even higher at a 19.4% and 13.1%, respectively (Gundersen, Dewey, Crumbaugh, Kato, & Engelhard, 2019). The inability for people to procure healthy food for their households has significant implications.

1 in 5 Pittsburgh residents live with food insecurity

Food insecurity is a major social determinant of health, and low income and people of color are especially vulnerable. For children, food insecurity poses serious threats which may continue into adulthood. This includes increased likelihood of hospitalization, anemia, and developmental impairments, along with social implications such as behavioral problems and difficulty in school. For people of all ages, the combined stress related to food insecurity and poor nutrition can make disease management more difficult and increase the risk of depression, heart disease, diabetes, obesity, and other diet-related chronic diseases. These health problems are exacerbated in low-income communities where there are heightened levels of stress, anxiety and depression, fewer opportunities for physical activity, and greater exposure to marketing of obesity-promoting products. People faced with food insecurity are also less likely to have health insurance (Feeding America, 2018).

In a city where more than 1 in 5 residents face food insecurity, there is a critical need for the City of Pittsburgh to intervene through leadership and collaboration. Tackling the myriad and complex problems that surround the function, and dysfunction, of our current food system will require input from a variety of actors. The City of Pittsburgh is in a unique position to inform the approaches taken by nonprofits and other City agents, as well as to utilize the existing network of resources that City agencies have to reduce food waste and insecurity. Faced with this opportunity, the City of Pittsburgh’s OnePGH Initiative (2017) commits to “improving access to healthy, affordable food choices” as a resilience objective. Additionally, in 2019, the City adopted the UN Sustainable Development Goals, which includes achieving Zero Hunger.

This report provides an overview of food insecurity in Pittsburgh. Through United Nations research, we look at the causes of food insecurity through four elements: food availability, food access, food utilization, and food system stability. Measures from these elements are used to determine the Healthy Food Priority Areas (HFPAs) in the City. Finally, identified goals and concrete action items are proposed as the first steps towards food equity for all Pittsburgh residents.

Dimensions of Food Security



Food insecurity forces impossible choices from a lack of money or other critical resources (U.S. Department of Agriculture, Economic Research Service, 2019b): Do I feed my children or pay the electricity bill? Do we skip a meal or forgo necessary medical treatments? Should we sacrifice quantity of food or quality? To better understand Pittsburgh's landscape of hunger and work towards solutions, this report begins with an overview of the four dimensions of food insecurity identified in the United Nation's 2018 Report (FAO, IFAD, UNICEF, WFP, & WHO, 2018): food availability, food access, food utilization, and food system stability.

Food Availability

The first dimension of food security is related to the production, transportation, and distribution of adequate food to a population, or the availability of local and wild foods or food reserves. The past century has seen an explosion in the amount of food produced in the United States, leading to unprecedented levels of food available for the population as a whole. In 2010, the United States produced an average of 4,000 calories per person per day – double a person's average daily dietary needs (Center for Sustainable Systems, 2019). Unlike much of the past where one or two staples like grain and dairy made up the bulk of an individual's diet, Americans today enjoy a wide array of abundant food such as meat, seafood, fruit, and vegetables. This abundance, however, is not equally distributed.

To explain this unequal distribution of food, the United States Department of Agriculture (USDA) uses the term “food desert” to describe a neighborhood with insufficient stores that carry healthy and affordable foods such as fresh fruit and vegetables (Ver Ploeg, 2009). In recent years, the term “Food Apartheid” has been used in place of “food deserts,” pointing out two facts. First, these are not barren landscapes but are, in fact, lively, active, communities. Second, the lack of food options in a neighborhood did not happen naturally or accidentally, but instead is the result of racist policies and economic inequality (Sbicca, 2012). In Baltimore, community-engaged research revealed that community members preferred replacing the term ‘food desert’ with ‘Healthy Food Priority Areas’ to better explain food access issues (Johns Hopkins Center for a Livable Future, 2018). While keeping these important considerations in mind, this report uses the terminology of “limited food availability” to distinguish between food availability and access, unless it is quoting other authors who have used the term “food desert.”

Almost half of Pittsburgh's residents live in a “food desert,” according to a 2012 United States Department of Treasury report (McCart, 2015). Lacking direct access to healthy food, residents in limited food availability areas can be restricted to sporadic trips to a distant grocery store or processed foods available at local convenience stores. Without access to a vehicle, public transportation and ride sharing become necessary. A study by RAND on food purchasing habits of Hill District and Homewood residents noted that a majority of residents utilized public

Dimensions of Food Security

transportation or a form of ride sharing (either among friends or paying strangers) (Dubowitz, Zenk, et al., 2015). In addition, transportation costs of both money and time can be burdensome for low-income households that do not have an abundance of either (Hartline-Grafton, 2015). In a city with imperfect food distribution, many people do their grocery shopping at supermarkets outside of their neighborhoods and well beyond a reasonable walking distance.

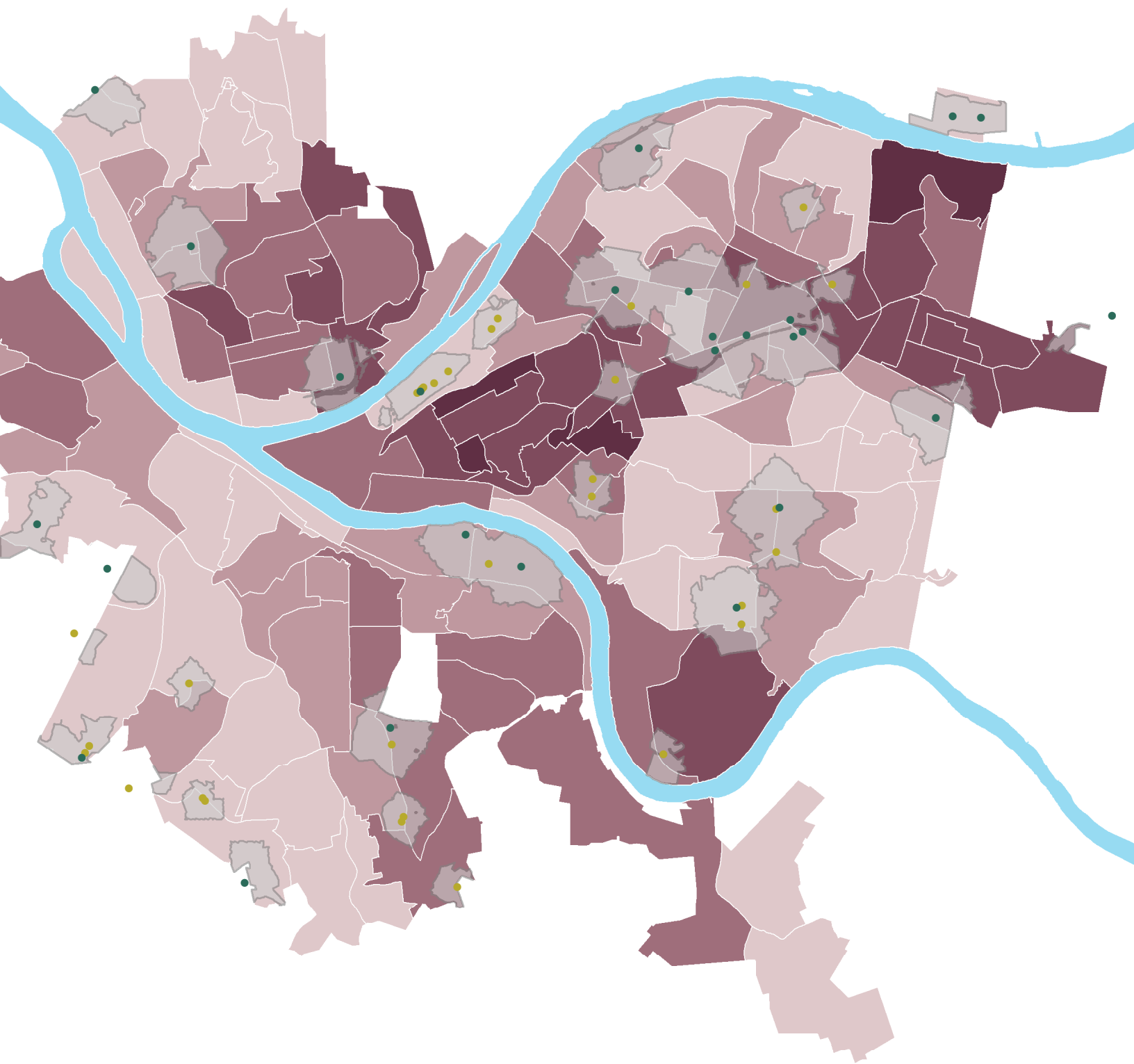
However, with new technologies and trends, distance from a grocery store may soon no longer dictate food availability in the United States. In 2017, about two percent of U.S. grocery sales were done online. While this still represents a small share of total grocery sales, it is a 38% growth from previous years with more growth predicted going forward (Haddon & Jargon, 2019). Currently, stores across Pittsburgh including Giant Eagle, Aldi, and Walmart offer both grocery pickup and delivery services in the city (Huba, 2018; Ritenbaugh, 2018).

In 2020, the USDA expanded a SNAP grocery delivery pilot program to include Pennsylvania. Unfortunately, many grocery delivery services are still not yet able to accept online SNAP payments in Pennsylvania, and delivery and service fees make delivery even more expensive than shopping in person. The combination of these factors currently make food delivery inaccessible to the average household burdened with food insecurity (Perez, 2019).

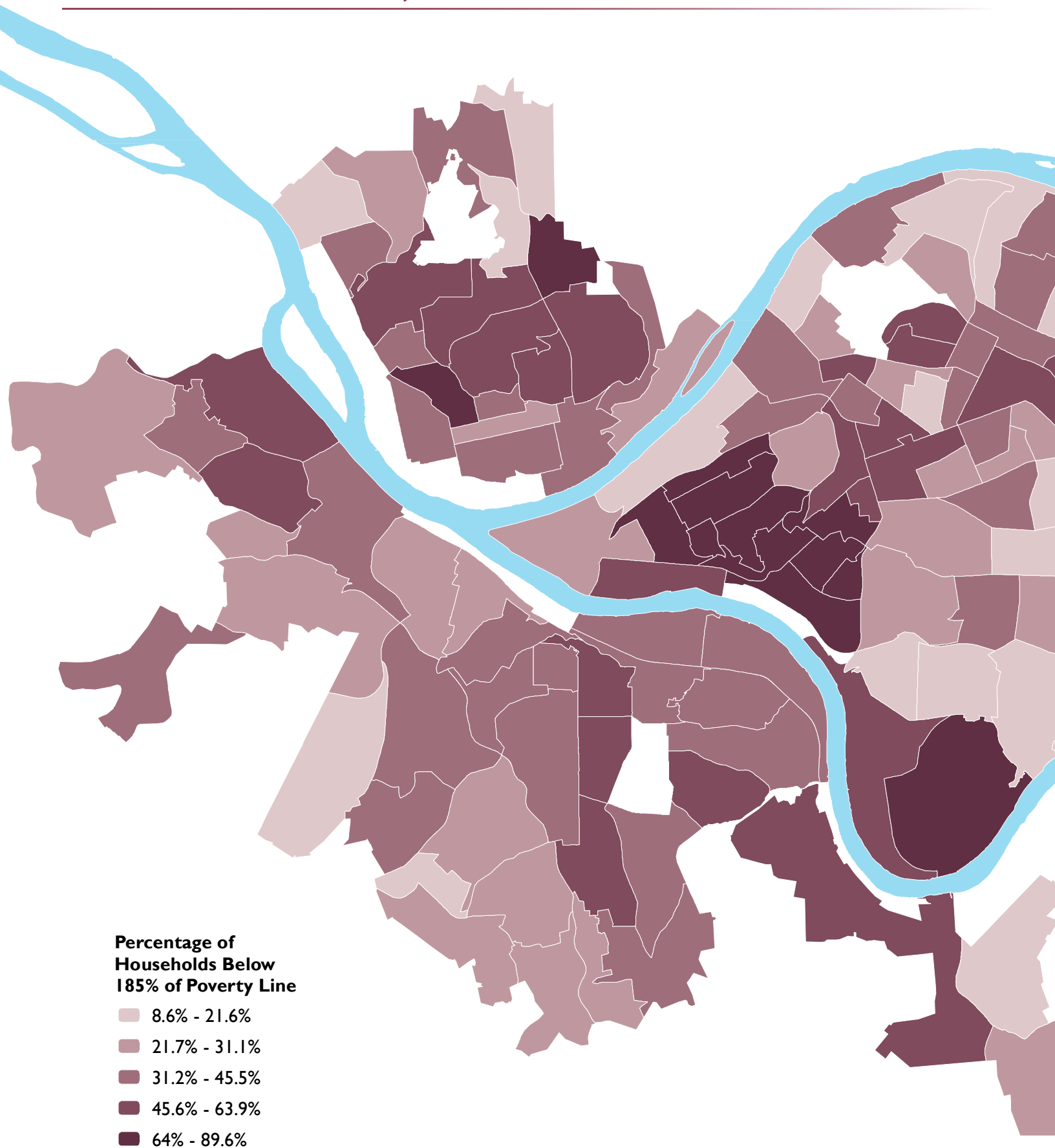
- Grocery Stores
- Ethnic Markets and Convenience Stores
- Walksheds

Percentage of Households with No Vehicle Access

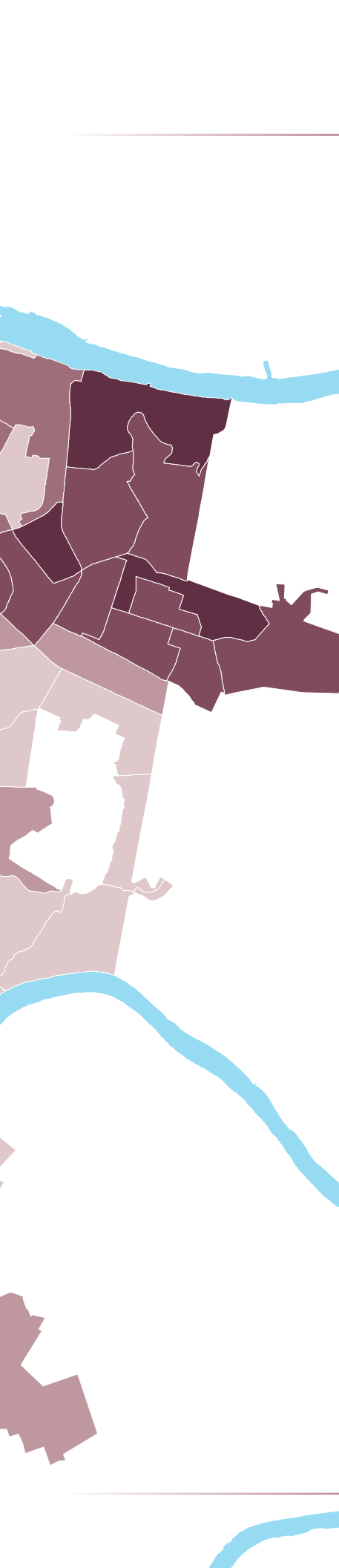
- 0% - 12.2%
- 12.3% - 23.7%
- 23.8% - 35.8%
- 35.9% - 58.7%
- 58.8% - 84.1%



Dimensions of Food Security



Food Access



In Pittsburgh, an estimated 22.3% of the population lives below the poverty line (U. S. Census Bureau, 2018). Because of this, the biggest food-related obstacle for most is not just availability, but access; that is, access to the economic and social resources to purchase healthy food. Though preliminary research suggested that food access is primarily related to distance to food retailers, more recent research has shown that mere distance to grocery stores does not necessarily have an effect on healthy food consumption, and other economic and social factors also limit access to foods (Rosenberg & Cohen, 2018). An in-depth 2015 study of Pittsburgh residents' proximity to grocery stores in the Hill District and Homewood neighborhoods, with mean household incomes of less than \$15,000 per year, found that there was little to no relationship between proximity to healthy food retail and purchase or consumption of healthy foods (Dubowitz, Ghosh-Dastidar, et al., 2015).

Thus, food access must go beyond proximity to grocery stores to address the root causes of inequality, including systemic economic disparities, poverty, and oppression (Rosenberg & Cohen, 2018). Research has found that a diet of healthy foods can cost up to \$550 more per person a year. In practice, this means that some households are forced to skip meals and cut portions, creating unhealthy periods of under- and over-eating to overcome day-to-day expenses. Aside from having significant implications for physical health, hunger also severely impacts mental well-being and heightens stress (Greater Pittsburgh Community Food Bank, 2017). Even for those who are not forced to frequently skip meals, financial pressures force the prioritization of cheap, calorie-dense foods over healthier options (Rao, Afshin, Singh, & Mozaffarian, 2013).

In the long term, the reduction of poverty through wide-ranging social and economic policies is essential to achieving food security throughout Pittsburgh and Allegheny County. A hungry family, however, does not have the privilege of the long-term view. Whether for the short- or long-term, federal and state governments operate a number of programs to combat food insecurity, ranging from emergency food provisions to monetary assistance. Studies have shown that the Supplemental Nutrition Assistance Program (SNAP) is the single most important anti-hunger

Dimensions of Food Security

initiative in the country because it is accessible to almost all low-income households. SNAP currently helps some 40 million recipients throughout the US access food, which reduces the poverty cycle by improving the economic and health outcomes for children whose families received benefits (Center on Budget and Policy Priorities, 2018). However, while research continues to prove that anti-hunger programs, such as SNAP, are essential for maintaining fed populations, these programs continually face threats to their existence as policy makers propose budget cuts to eliminate them. The Trump administration has publicly championed changing the Farm Bill to increase the work requirements for SNAP eligibility and close pathways that allow states to waive the work requirements in areas of high unemployment despite evidence that this would increase the risk of food insecurity for millions of Americans (Rogers & Edmondson, 2018).

To ensure that those living in poverty have access to food procurement resources, it has been suggested that the following federal and state welfare programs be protected and expanded.

Federal and State Run Programs

Supplemental Nutrition Assistance Program (SNAP): Benefits are placed in an electronic account and can be redeemed at participating grocery stores, supermarkets and farmers' markets. In October 2018, more than 23,000 households in Pittsburgh received SNAP benefits (U.S. Census Bureau, 2016).

Special Supplemental Food Program for Women, Infants & Children (WIC): Provides supplemental food, nutrition education, and referrals to healthcare at no cost to low-income, pregnant, breastfeeding, and postpartum women, as well as infants and children up to age 5 determined to be at nutritional risk. In 2013-2014, over 15,000 women in Allegheny County received WIC benefits (Greater Pittsburgh Community Food Bank, 2016).

State Food Purchase Program (SFPP): Provides cash grants to counties for the purchase and distribution of food to low income individuals. The \$1.5 million allocated to Allegheny County in Fiscal Year 2017-18 helped feed almost 200,000 households (Pennsylvania Department of Agriculture, 2019).

The Emergency Food Assistance Program (TEFAP): TEFAP is a federally-funded program that provides commodities for distribution to food assistance providers. In Fiscal Year 2014-2015, Greater Pittsburgh Community Food Bank distributed over 37,000 cases of TEFAP commodities (Greater Pittsburgh Community Food Bank, 2016).

Commodity Supplemental Food Program (CSFP): Distributes a box of nutritious food each month to low-income seniors aged 60 or older. Also known as senior boxes, this program served over 4,000 low-income seniors in Allegheny County in 2015 (Greater Pittsburgh Community Food Bank, 2016).

National School Lunch and Breakfast Programs: Provides free or reduced-price meals to school children. Approximately 70,000 children in Allegheny County are eligible for free or reduced breakfast and lunch, although about 43% of students who eat free or reduced lunch do not opt for the free or reduced breakfast (Behrman, 2019; Greater Pittsburgh Community Food Bank, 2016).

Summer Food Service: Provides meals and snacks to children over the course of the summer. In the summer of 2015, about 720,000 meals and snacks were distributed to children in Allegheny County (Greater Pittsburgh Community Food Bank, 2016).

Child and Adult Care Food Program (CACFP): Serves meals through sites that meet specific eligibility criteria. In 2013-2014, almost 6.5 million meals and snacks were served (Greater Pittsburgh Community Food Bank, 2016).

Farmers' Market Nutrition Program: Provides WIC recipients and low-income seniors with unprepared, locally grown fruits and vegetables from approved farmers in Pennsylvania. This program benefitted approximately 5,400 WIC recipients and 18,700 seniors in Allegheny County in 2014 (U.S. Department of Agriculture, Food and Nutrition Service, 2019).

Congregate and Home Delivered Meals: Serves meals to seniors based on age or in-home assessments. In 2013-2014, over 10,000 seniors received meals (Greater Pittsburgh Community Food Bank, 2016). This is funded through the Older Americans Act Nutrition Program (U.S. Department of Health and Human Services, Administration for Community Living, 2019).

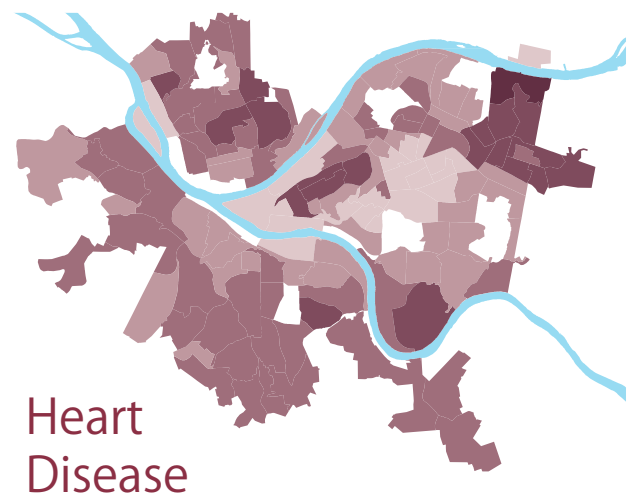
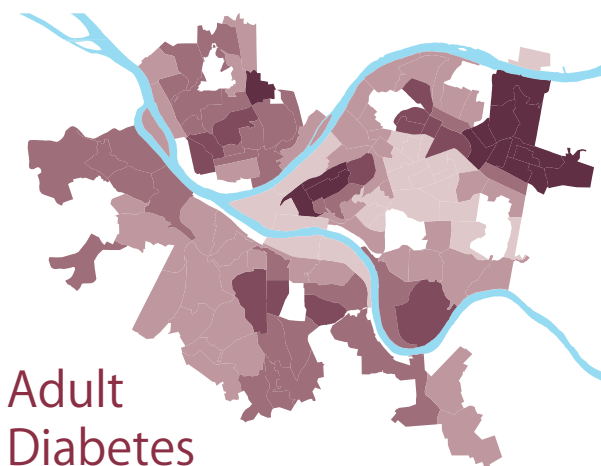
Food Bucks: A project of Philadelphia-based nonprofit, The Food Trust, and administered locally in partnership with Just Harvest, the Food Bucks Program distributes a \$2 voucher for fresh fruits and vegetables for every \$5 of SNAP purchases at participating farmers' markets and retail locations. Shoppers using Food Bucks have redeemed over \$50,000 worth of fresh produce since 2018. The program is funded through the U.S. Department of Agriculture's Food Insecurity Nutrition Incentive (FINI) grant (The Food Trust, 2019).

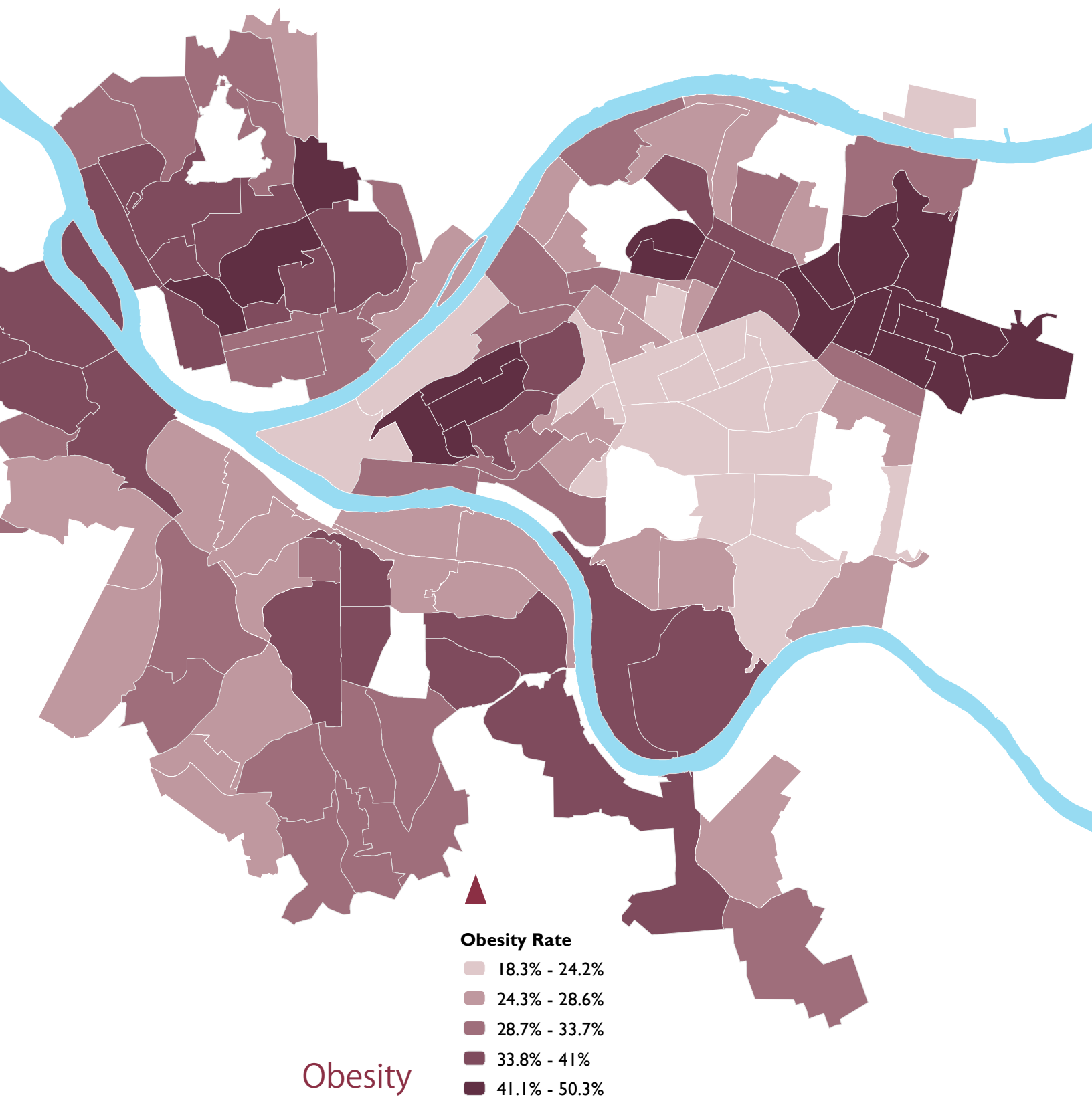
Food Utilization

Accessible, affordable food is vital for a healthy, well-fed population, but it is also essential that individuals have adequate knowledge about nutrition and food preparation to make healthy choices. Food utilization is most often compromised in households that are unaware of the effects of various types of food on their well-being, or when lack of food availability and access leads them to purchase cheap and low-nutrition food (FAO et al., 2018).

Incidentally, fresh food in low-income communities is often low quality. An off-putting size or color may dissuade individuals from selecting fresh produce and instead choosing more appealing and shelf-stable items that often contain significant amounts of sugars and fats. Even when produce is available in low-income communities and is of comparable quality to food available in middle and high-income communities, the overabundance of distinctly unhealthy eating options (particularly in the form of fast food restaurants) in low-income communities acts as an obstacle for families short on time – perhaps working multiple jobs – who may be trying to eat healthier (Hartline-Grafton, 2015).

In addition to lack of healthy food options, food utilization could also be compromised due to lack of refrigeration, a working stove, or contaminated water. “Washing or cooking food with water contaminated with bacteria, parasites, or heavy metals is poor food utilization” (FAO et al., 2018).





Food System Stability

A stable food system is one that can handle various shocks without collapsing. These shocks can include price fluctuations, severe weather events, and logistical or distributional breakdowns (FAO et al., 2018). Perhaps the most urgent threat to food stability is climate change which, whether consumers are yet aware of it, is already impacting crop yields and altering best practices on the local and international scale. The overall impact of climate change on food production in the United States is uncertain but will largely depend locally on the ability of farmers to adapt to higher temperatures, extreme weather events, and changing precipitation patterns (U.S. Environmental Protection Agency, 2016a, 2016b).

In Pennsylvania, climate change has both potential positive and negative impacts on food production. Some crops will respond well to an increased growing season and rising levels of carbon dioxide in the atmosphere, while others – most notably corn, Pennsylvania’s most important crop – may respond negatively to increasingly hot summers. High temperatures also depress a cow’s appetite and will likely reduce their production of milk and beef, both of which account for a significant portion of Pennsylvania’s agricultural output. Meanwhile, pests like weeds and corn earworm will have more time to multiply and wreak agricultural havoc during an earlier spring (U.S. Environmental Protection Agency, 2016b).

Stirring amongst all this uncertainty is the certainty that the global population, and thus demand for food will increase and potentially increase local food prices (U.S. Environmental Protection Agency, 2016a). There is little that can be done directly on the municipal level to address the broader stability of the national food system, but several approaches can be taken to improve the stability of the local and regional food systems.

Summary

Increasing food security is a complex undertaking with multiple dimensions. To address food availability, we must consider how food is distributed to people *and* how people get to food. Food access, the ability to afford healthy food, requires considering the cost barriers and employment opportunities and workforce protections. Seeking improved food utilization requires enabling people to grow and cook their own food along with shifting the cultural landscape towards more sustainable food practices. Finally, we must continue to support institutions that develop and bolster urban and regional agriculture to build up greater food system stability.

Objectives Towards Increasing Food Security

Food Availability

The production, transportation, and distribution of adequate food to a population, or the availability of local and wild foods or food reserves



Improve **Distribution** of food to people



Address **Transportation** of people to food

Food Access

The ability to afford healthy food



Reduce Cost Barriers to purchasing healthy food



Provide **Workforce Development** protections and opportunities – especially with *growing* and *cooking* food

Food Utilization

Adequate knowledge about nutrition and food preparation to make healthy choices



Enable people to **Grow** their food to increase familiarity and establish norms around fresh vegetables



Enable people to **Cook** healthy foods



Create opportunity for a **Cultural Shift** around how we eat and waste food

Food System Stability

Ability to withstand shocks and stressors without collapsing



Support Institutions that develop and bolster urban and regional agriculture

Healthy Food Priority Areas



Food insecurity in Pittsburgh is widespread, impacting households in every neighborhood in the city. Yet, the data presented in Figures 1-3 depict a clear trend: Some areas of the city struggle with food insecurity more than others. In some places, a lack of vehicle access coincides with a lack of grocery stores, high rates of poverty and negative diet-related health outcomes. As the language of “food apartheid” illustrates, this overlap is no mere coincidence. In U.S. urban contexts, those areas with the highest levels of food insecurity are often communities of color; according to the USDA, 21.2% of African American households and 16.2% of Hispanic households in the U.S. were food insecure in 2018, compared to the national average of 11.1% food insecure for the population as a whole (U.S. Department of Agriculture, Economic Research Service, 2018).

The Healthy Food Priority Area (HFPA) designation was developed by the City of Baltimore in 2018, at the recommendation of community groups and food equity advisors, to shift the framing of its areas of high food insecurity from the “food desert” narrative (Johns Hopkins Center for a Livable Future, 2018). HFPAs are places in a city that are prioritized for action against food insecurity. In Baltimore, the HFPA designation has helped its city planners determine targeted investment strategies and specialized zoning rules (Baltimore Department of Planning, 2016).

To identify the HFPAs for the City of Pittsburgh, census tract data was mapped and analyzed to determine a combined score ranging from 0 – 30 for food availability, food access, and food utilization.

- **Food Availability Score:** Food Availability was calculated by considering in the percentage of households with no vehicles and the area of each census tract considered to be beyond reasonable walking distance from a food market – 0.5 miles for grocery stores and 0.25 miles for small, fresh food markets.
- **Food Access Score:** Food Access was determined by the percentage of households with an income 185% below of the poverty line.
- **Food Utilization Score:** Rates of adult coronary heart disease, obesity, and diabetes were considered in equal part to determine Food Utilization.

While the available data used to quantify food insecurity has its limitations, the HFPAs provide the City with an important starting point. For more information on data sources and methodology, see the Appendix (pages 31-32).

Healthy Food Priority Areas

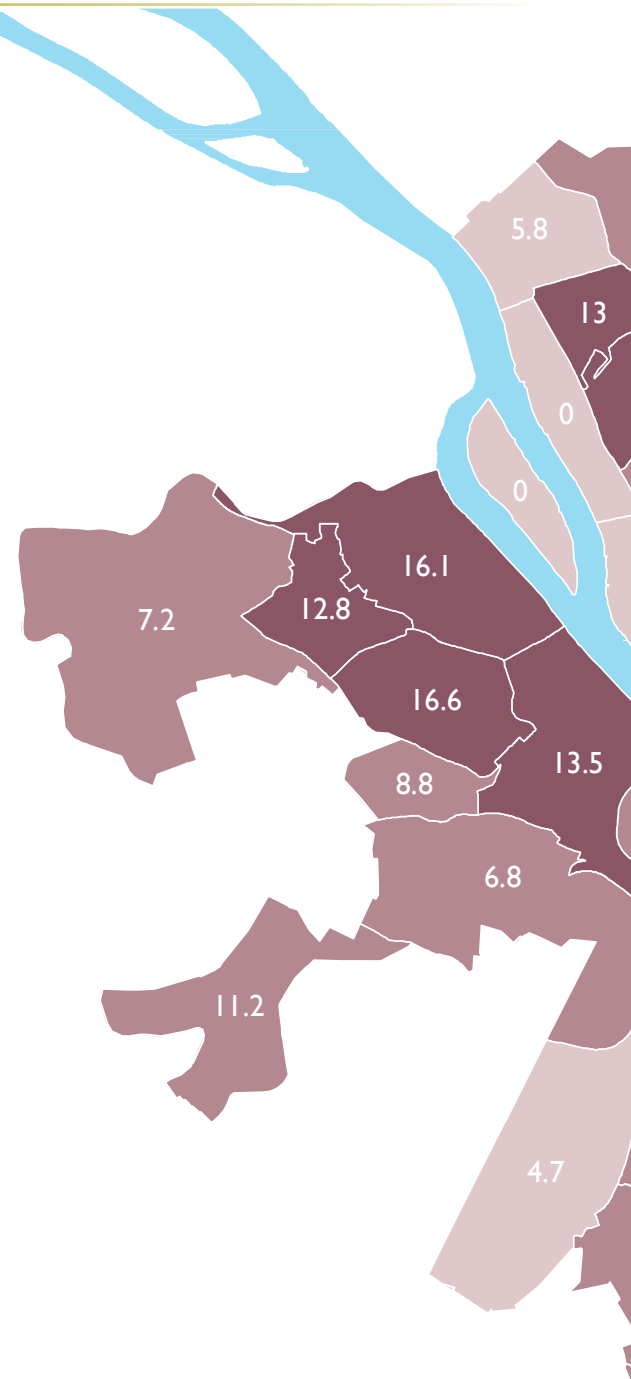
While no neighborhood in the city is beyond concern, Healthy Food Priority Areas (HFPAs) are where the City and its partners need to prioritize investment and support. The HFPAs in the City of Pittsburgh are census tracts which received a score of 18 or higher in our analysis of food insecurity in Pittsburgh. Specifically, it is critical to acknowledge that of the 23 HFPA census tracts, 2 are composed primarily of college students and 18 are predominantly black. Additionally, over 70% of the residents within the identified HFPA census tracts are black. While about 12% of Pittsburgh residents reside in HFPAs, more than a third of the City's black residents reside in HFPAs while less than 5% of white residents do.

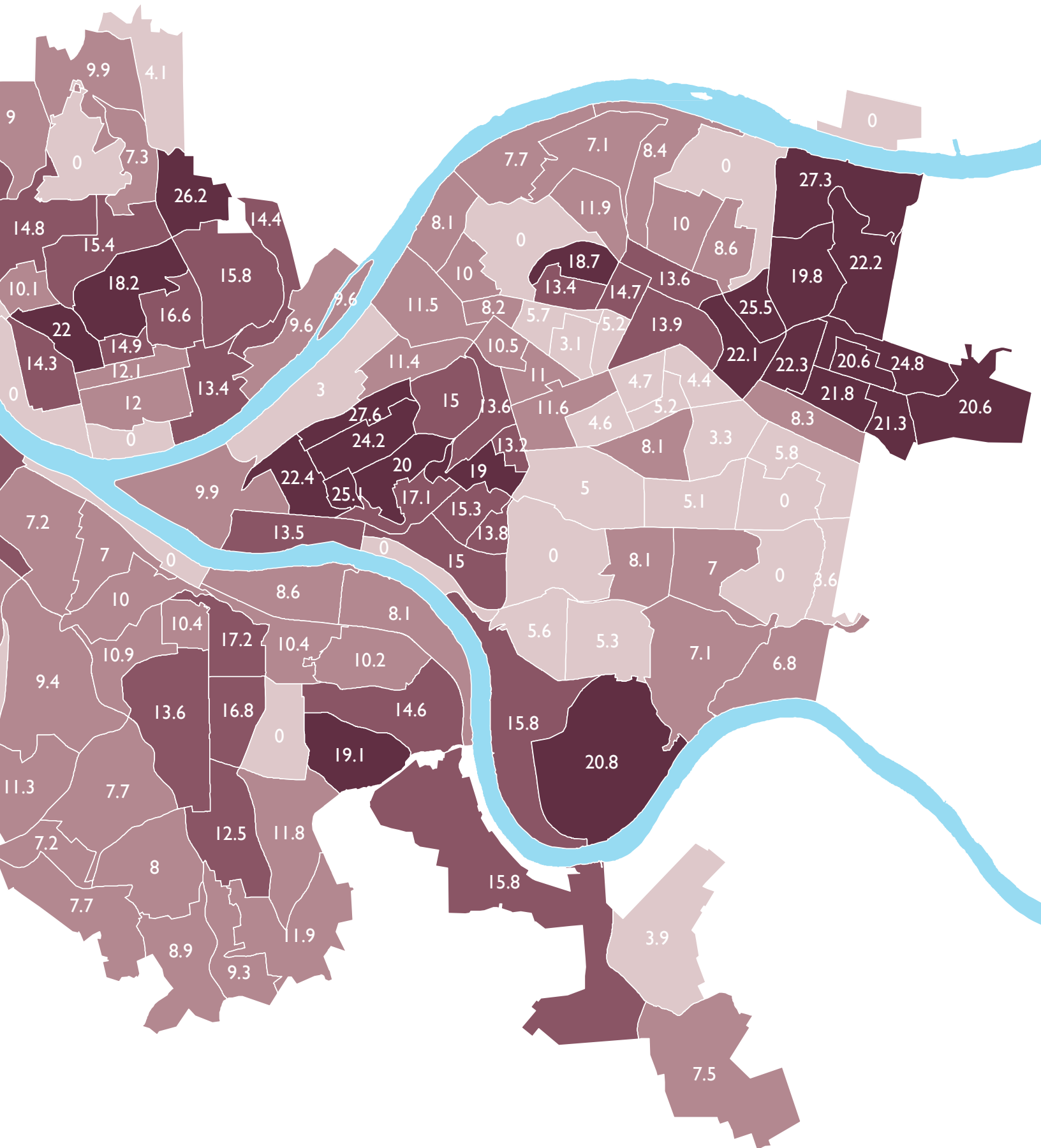
1 in 3 black residents live in HFPAs

Examining the HFPA scores, census tracts with high population of black residents, both in number and percentage, were correlated with higher scores while the opposite was observed with predominantly white census tracts. The realities of this racial inequality mean that work is required to undo “food apartheid.”

The following neighborhoods contain the HFPAs:

1. Greater Hill District, especially Bedford Dwellings, Middle Hill, Crawford Roberts, and Terrace Village
2. Lincoln-Lemington-Belmar, Larimer, East Hills, and Greater Homewood
3. Northview Heights, Perry South, and California-Kirkbride
4. Hazelwood and Glen Hazel
5. St. Clair
6. Garfield





Goals



As part of the OnePGH resilience strategy, ensuring food security and healthy food access are critical priorities to fostering an environment where every Pittsburgh resident can flourish. Tackling the complex challenges of our current food system requires input from a variety of stakeholders, however, municipal government is uniquely positioned to create a landscape for nonprofits and other entities to succeed, as well as to utilize the existing network of resources that city agencies have to ensure food security and healthy food access. Furthermore, as the largest municipality in the region, Pittsburgh has an opportunity to shape the landscape of the entire regional food system.

Healthy Food Priority Areas are a critical tool for the City to use in determining which areas of Pittsburgh require more resources and investment to advance food equity. Through targeted interventions in Priority Areas and city-wide initiatives, the City of Pittsburgh has established the following goals:

1. **Develop Food Pathways**: Guarantee that everyone is able to access healthy food, regardless of income, race, or zip code through improving food availability / access and reducing existing barriers
2. **Develop People**: Create opportunities for people to learn new food skills and improve employment opportunities by equipping the next generation with food skills and developing the food system workforce
3. **Develop Place**: Cultivate a local food economy within Pittsburgh's communities and neighborhoods by ensuring that every neighborhood has a Food Action Plan while also strengthening urban agriculture and the regional food system
4. **Develop Culture**: Promote healthy, sustainable food choices that enrich our residents' relationship with food and promote institutional changes that shift our food system

These goals address the different challenges of food security through multifaceted strategies. As a follow-up to the FeedPGH report, the Initiatives Guide will detail ongoing initiatives and potential initiatives that the City will act upon with guidance from residents and partnership with the Pittsburgh Food Policy Council.

Goals

	Availability		Access		Utilization			Stability
Goals	 Distribution of Food	 Transport to Food	 Reduce Barriers	 Workforce Dev	 Grow Food	 Cook Food	 Cultural Shift	 Support Institutions
Develop Food Pathways								
Improve Food Availability/Access	•		•					•
Reduce Barriers		•	•					
Develop People								
Equip the Next Gen with Food Skills				•	•	•	•	
Develop the Food System Workforce			•	•	•	•		
Develop Place								
Neighborhood Food Action Plans							•	•
Strengthen Urban Ag/Regional Food System				•	•			•
Develop Culture								
Promote Sustainable Food Choices							•	
Promote Food System Changes							•	•

In Relation to the SDGs

In October 2019, Mayor Peduto announced the City's commitment for Pittsburgh to meet the United Nations Sustainable Development Goals (UN SDGs), 17 worldwide goals designed to eradicate poverty, protect the planet, and improve the quality of life for every human being. The goals outlined in this report are critical to achieve SDG 2, Zero Hunger. However, the goals to develop food pathways, develop people, develop place, and develop culture also will positively impact many of the other SDGs.



As outlined in this report, poverty is a major indicator of food insecurity (SDG 1.B). Developing people and place will provide opportunities to reduce poverty while developing better food pathways to reduce barriers to food access. It will help to alleviate some of the negative conditions of poverty (SDG 1.3, 1.4).



Food is vital for survival and is a fundamental human right. The FeedPGH goals are aimed at sustaining a reality where no resident goes hungry (SDG 2.1) and all residents receive culturally appropriate and nutritious food (SDG 2.2) from a sustainable food system (SDG 2.4).



Food and diet play a role in many chronic diseases. With better access to fresh food and proper knowledge about how to prepare it, we can reduce the amount of negative health outcomes from diet-related diseases in the region (SDG 3.4).



Eating well starts in childhood, and educating our youth is critical to achieving food security. Equipping the next generation with food skills, from growing to cooking food, and developing cultural shifts in cuisines, education will be instrumental in shaping the future of the food system (SDG 4.7).



It is essential for the City to continue to develop new opportunities (SDG 8.3) while also protecting the existing food system workforce (SDG 8.8). These efforts to develop people will impact the outcomes of decent work and economic growth (SDG 8.5).



As seen in this report, food insecurity has major impacts on a disproportionate number of Black residents and on predominantly Black neighborhoods within Pittsburgh. Equitable development of people and place with regards to food security will be critical to reduce inequality (SDG 10.2, 10.3, 10.4, 10.A).



The HFPAs specify the priority areas for the City to invest for inclusive development (SDG 11.3, 11.C). Additionally, equitable distribution of and transportation (SDG 11.2) to food and investing in local and regional food infrastructure (SDG 11.6, 11.A) is critical to have a sustainable city.



To achieve the FeedPGH goals, we will need to partner with many organizations and institutions in order to make progress (SDG 17.A).

Conclusion



Despite an overabundance of food production, Americans throughout the country still suffer from food insecurity stemming from poor food availability, access, utilization, and system stability. This report has explored challenges in Pittsburgh's food system and has identified Healthy Food Priority Areas (HFPAs) and opportunities for the City to target investment.

We hope to develop food pathways to ensure the availability and access of healthy and affordable food for all residents; develop and equip the people of Pittsburgh with food skills; develop the communities and neighborhoods of Pittsburgh to ensure food security while also strengthening the regional food system; and change how the City and the residents view food through promoting sustainable food choices. In the FeedPGH Initiatives Guide, we will maintain an evolving document that can point us towards a healthier, more sustainable, and more equitable future. It cannot be a static plan but will require continued iteration as new information is gathered from residents, policymakers, and best practices across the country. Step by step, we will embark upon our goals with annual action items and progress updates.

It is time for the City of Pittsburgh to take on a renewed role in the pursuit of the systemic change that will be necessary to establish food equity. Every resident has a right to food, regardless of income, race, or zip code.

*Together, we can build a resilient food system
to ensure that every resident is food secure,
both now and into the future.*

2020 Action Items



Integrate Food into the Neighborhood Planning Process

Food is an essential part of daily life and a community should have voice in how food is produced, processed, distributed, and discarded in their neighborhood. The Neighborhood Food Toolkit will guide intervention ideas that could be pursued at the neighborhood level. It will work in conjunction with the Neighborhood Food Inventory, an interactive map for residents and the Department of City Planning's neighborhood planners.

Neighborhood Planners will integrate the Toolkit and Inventory into the neighborhood planning process alongside a measure of food equity to create Neighborhood Food Action Plans that can then guide the overall FeedPGH goals as they continue to develop over the years..

Form a Resident Food Equity Advisors Focus Group

Residents are the beating heart of this city, and it is an imperative that they have voice in how FeedPGH is planned and implemented. As a part of the broader OnePGH strategy, this group also could advise on other sustainability initiatives.

The Resident Food Equity Advisors (RFEA) will be composed of at least two residents from each council district. Meetings with the RFEAs will take place monthly for six months with specific questions around food equity and the FeedPGH goals. Food and childcare will be provided to ensure broad participation, and advisors will be compensated for participating at each meeting.



Join the Good Food Purchasing Program

This program is an opportunity for the City of Pittsburgh to reflect on our values around food procurement, leading the way to food equity by ensuring support for our local economy, environmental sustainability, valued workforce, animal welfare, and nutritional foods.

First, the City will issue a resolution for the Good Food Purchasing Policy. Working alongside the Center for Good Food Purchasing, the Sustainability and Resilience Division will perform an audit of existing food purchased or procured by the City to assess the baseline and identify next steps to ensure purchases made by City employees for City purposes meet minimum Good Food requirements.



Identify Priority Initiatives

Following conversations with Resident Food Equity Advisors, City Council, and other key stakeholders, we will perform an in-depth analysis of identified initiatives and begin taking further actions for implementation.

Hire More Staff

The City can play a role in improving the food environment through a variety of policies, from land use to transit. The City should designate full-time staff, and hire as needed, to bolster interagency and intragency collaboration, and act as the point of contact for local community groups, businesses and individuals interested in improving the Pittsburgh food system. Having full-time permanent staff dedicated to addressing food system issues is an indicator of prioritization.



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Appendix

Healthy Food Priority Area Data

Food Availability	
Food Market Walkability	2019 USDA Food and Nutrition Service SNAP Retailer Locator
Household Vehicle Ownership	2013-2017 American Community Survey 5-Year Estimates
Food Access	
Income below 185% of Poverty	2013-2017 American Community Survey 5-Year Estimates
Food Utilization	
Coronary Heart Disease, Obesity, Diabetes	2016 CDC 500 Cities: Local Data for Better Health

The Food Availability score was composed of a Food Market Walkability metric and Household Vehicle Ownership metric. Household Vehicle Ownership was defined as the percentage of households without a vehicle in a census tract. Food Market Walkability was defined to be the percentage of a census tract that is not within walking distance, as determined through the City's GIS walking data, to a food market. Only supermarkets, grocery stores, ethnic markets, and healthy corner stores that accepted SNAP were considered. For supermarkets and grocery stores, a range of 0.5 miles was used while ethnic markets and healthy corner stores had a range of 0.25 miles. The USDA uses a definition of 0.5 miles for determining distance from a supermarket (U.S. Department of Agriculture, Economic Research Service, 2019a). The range of 0.25 miles was used by Baltimore to determine their Healthy Food Priority Areas (Baltimore City Health Department, 2015). Given that ethnic markets and healthy corner stores are smaller and have less variety, 0.25 miles was used instead of 0.5 miles. The definition of supermarkets, grocery stores, and ethnic markets come from the Food Abundance Index Toolkit (Murrell, Sharma, Boulos, & Jones, 2011). Supermarkets are stores that offer a "full line of groceries" and often offer other services such as a deli or bakery while grocery stores are smaller markets. Ethnic markets are stores that mainly sell groceries of "specialized/ethnic food lines". Healthy corner stores are convenience stores participating in Just Harvest's Healthy Corner Store Initiative. Other stores were excluded as they do not have a wide variety of food options.

Healthy Food Priority Area Methodology

Each dataset was normalized to a scale of 0 to 10. The maximum value in a dataset would be assigned a value of 10 and the minimum would be assigned a value of 0. First, an initial normalized value based off the mean and standard deviation was used, followed by scaling it through the formula:

$$(x - \min) * 10 / \text{DIST}(\max, \min)$$

For the availability metric, the normalized values of the percentage of households without a vehicle and percentage of a census tract that is not within walking distance to a food market were multiplied and then scaled by taking a square root to ensure a distribution between 0 and 10.

$$N_{\text{availability}} = \sqrt{N_{\text{vehicle}} * N_{\text{walking}}}$$

Multiplication was used, instead of an additive function, because if a census tract did not have a grocery store but everyone owns a car, then availability is likely high (the metric is 0) due to everyone having transportation. Likewise, if no one owns a car but everyone is within walking distance to a grocery store, food availability is also high.

For the access metric, the measure for rate of poverty below 185% of the poverty line was normalized. For the utilization metric, each of the three individual measures (obesity, diabetes, and chronic heart disease rates) was normalized, then the aggregate of all of the individual measures was normalized.

To determine the final HFPAs, each of the three metrics were added together.

$$HFA = N_{\text{availability}} + N_{\text{access}} + N_{\text{utilization}}$$

The threshold value (18.22) was determined through setting the cutoff at one standard deviation above the average score.

AVG	12.26
MEDIAN	11.29
STDDEV	5.96

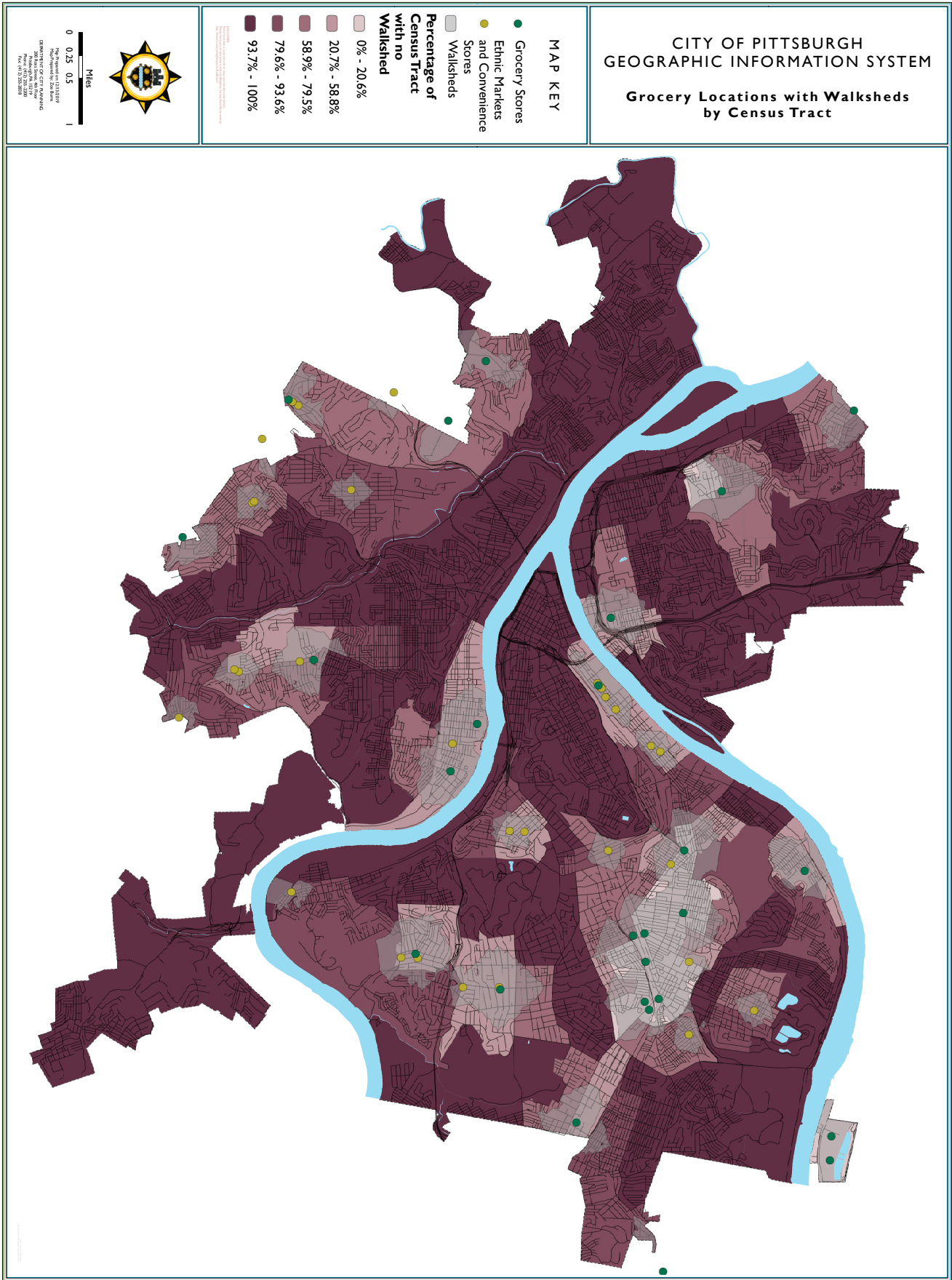
23 census tracts are above this threshold, accounting for 17% of the census tracts in the City.

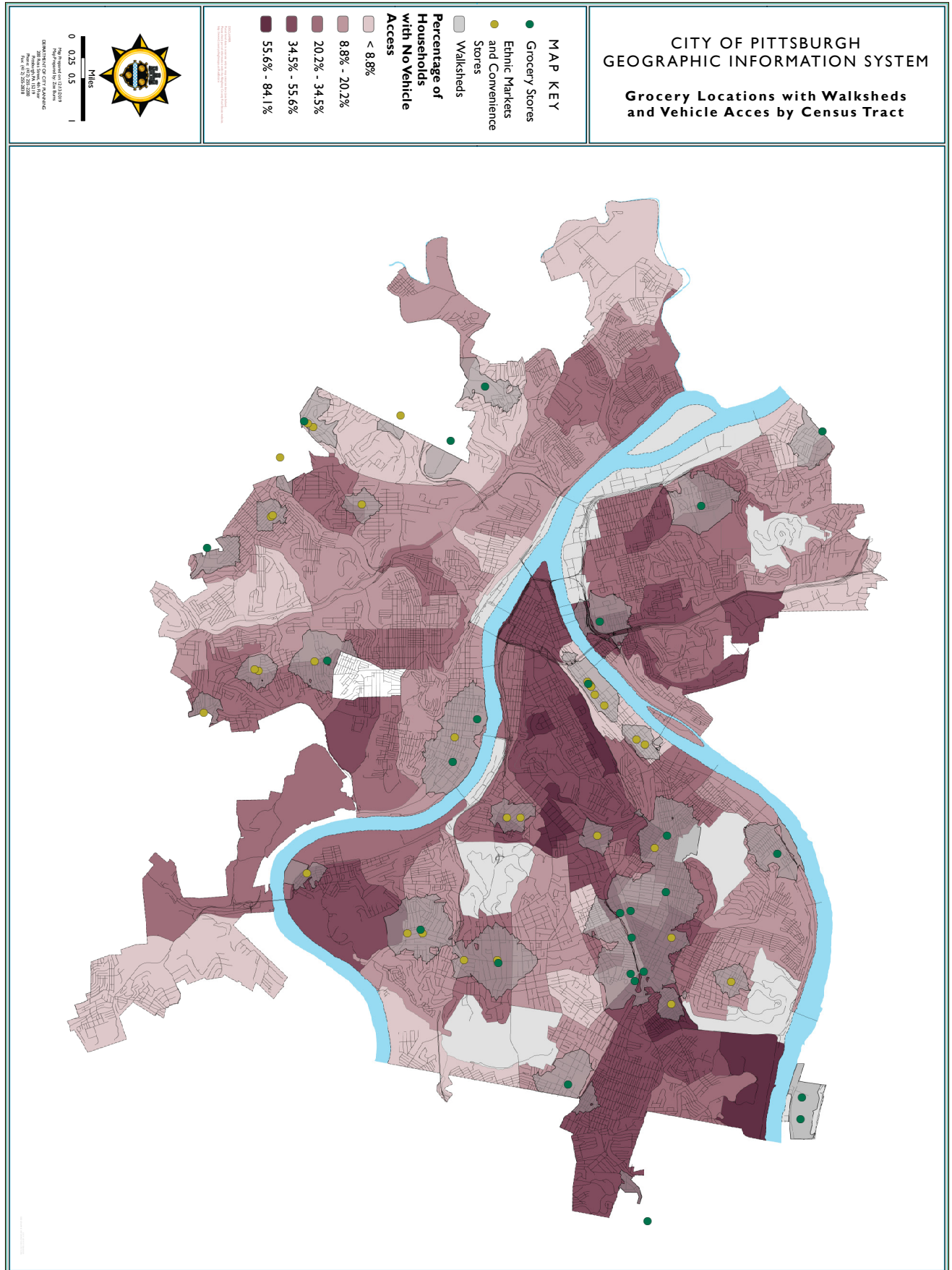
Additional Maps

This section includes additional maps:

- *Grocery Locations with Walksheds by Census Tract*
- *Grocery Locations with Walksheds and Vehicle Access by Census Tract*
- *Household Poverty Rate by Census Tract*
- *Diabetes Rate by Census Tract*
- *Obesity Rate by Census Tract*
- *Heart Disease Rate by Census Tract*
- *HFGPA Score by Census Tract*
- *Healthy Food Priority Areas*
- *HFGPA Score and Population Density*

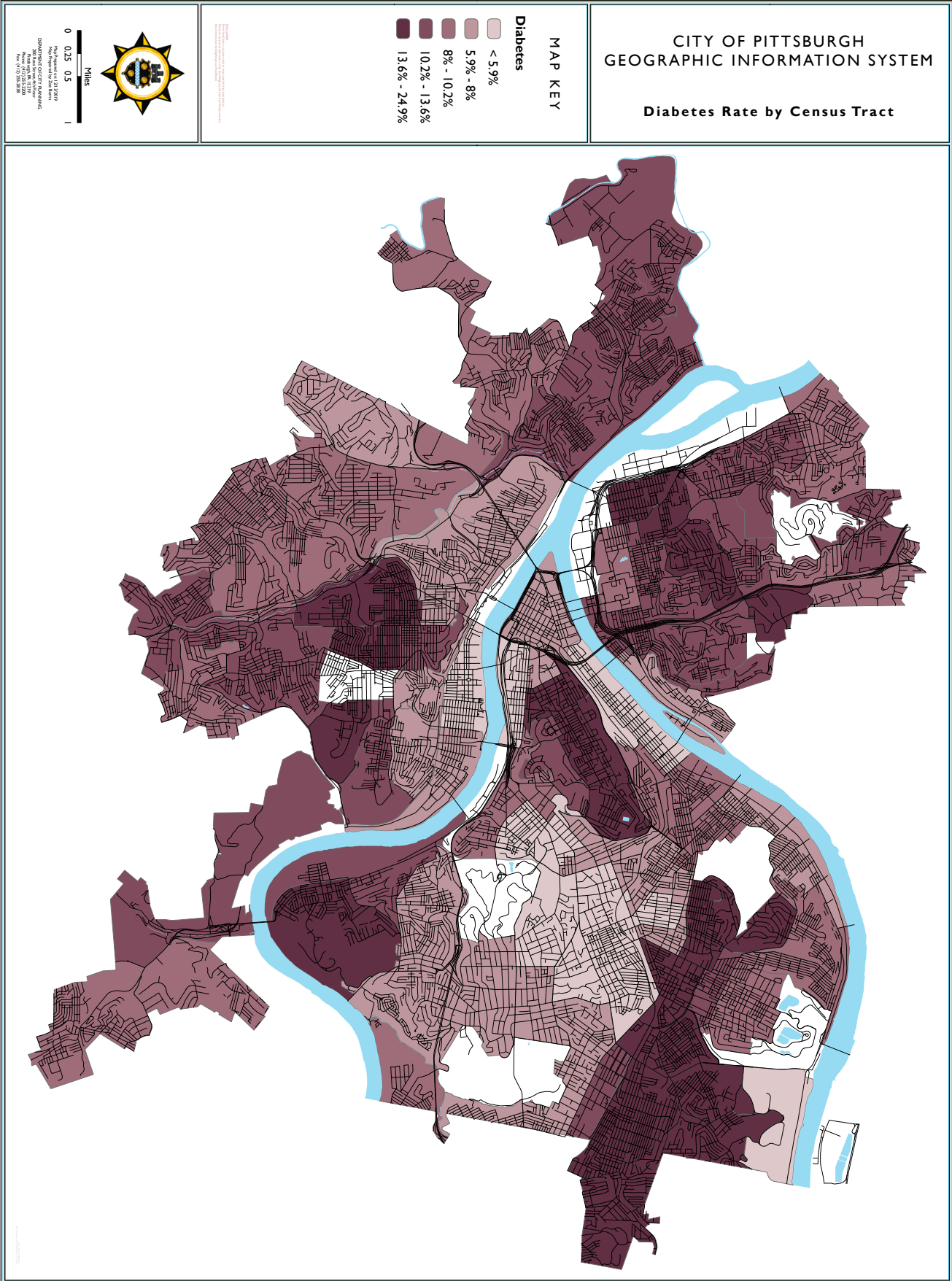
For copies of the additional maps, please see the Department of City Planning.

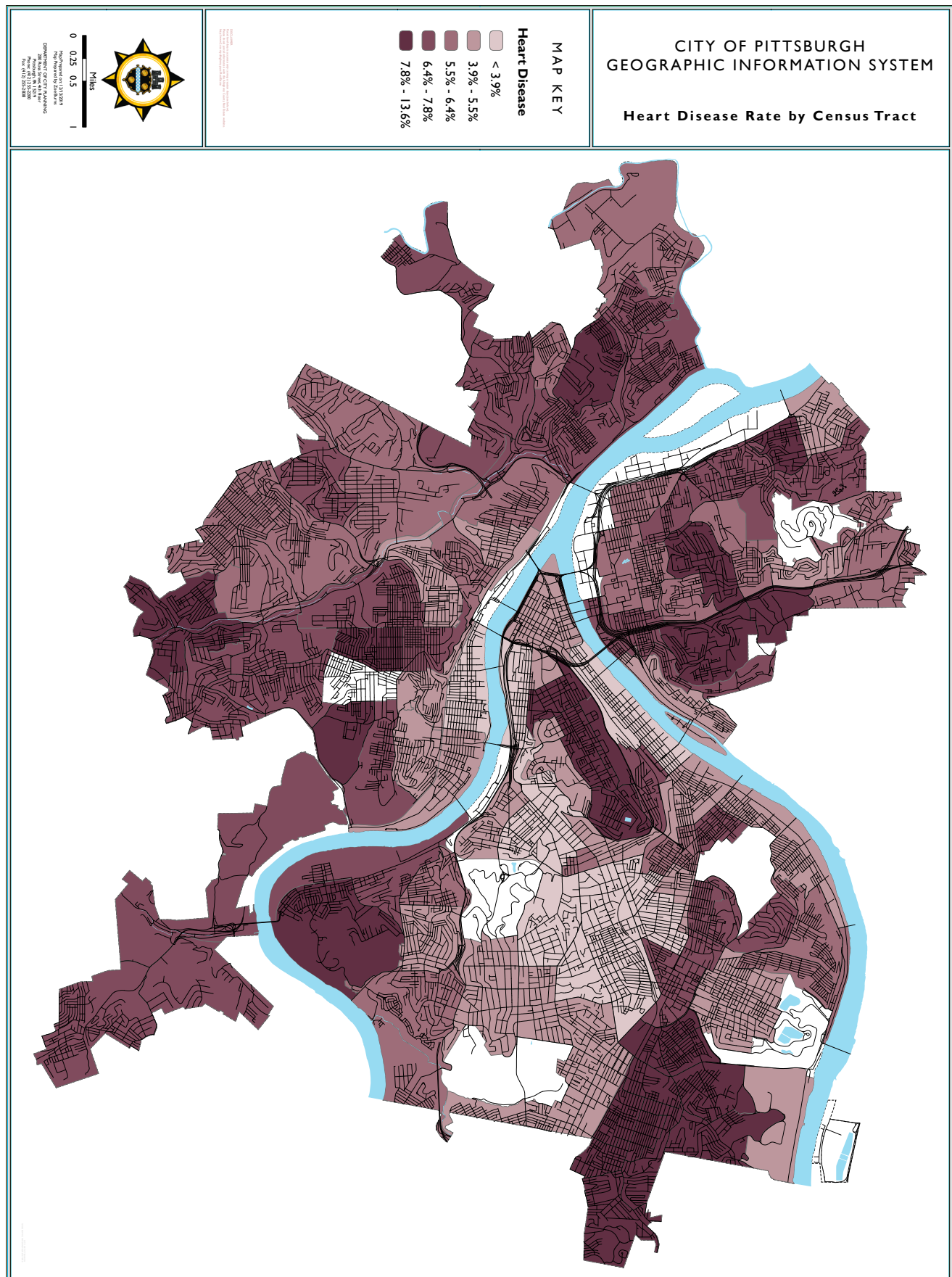






Appendix





HFPA Score by Census Tract



